TRANSPORT DOOR SOLUTIONS

MAINTENANCE SCHEDULE
&
FAULT FINDING CHECK LIST

Air-bleed Pneumatic System- fault finding.
Air bleed & Pressure Applied-cicuits-elec/pne.
Sensitive Edge-check list.
Service & Maintenance Guide.

CONTACT DETAILS:

Address: **43 Broton Drive, Halstead, Essex, CO9 1HB**
Tel: **01787 473000**
Fax: **01787 477040**
Email: **sales@transportdoorsolutions.co.uk**
Internet: **www.transportdoorsolutions.co.uk**

INTRODUCTION

Transport Door Solutions door system is a most durable system. By drawing on technology gained world-wide on both bus and rail, Transport Door Solutions have created doors for the P.S.V. market that are tough, reliable, maintainable, easy to install and safe. The doors utilise specially designed aluminium extrusions, which make them more resistant to damage and vandalism. The basic overall design allows easy installation and adjustment which means lower installation and maintenance costs.
Control systems include: Pneumatic, Electro-Pneumatic or Electric.

SERVICE GUIDELINES

Checks to be carried out upon initial service

SAFETY NOTE: Before any checks are undertaken, release all the air from the door system via the filter regulator located on (or near to) the shelf-plate.

These doors are designed for ease of use and operation. The amount of moving parts has been kept to an absolute minimum, thus reducing the levels maintenance required. The following guidelines are our recommended minimum level of service / inspection.

- ☐ Manually open and close the doors, checking that they are free running. Ensure top seal, aperture seal or door bottom active flaps are not impeding movement.
- ☐ Check doorguide roller and integral track on underside of shelf-plate are dry and free from grease.
- ☐ Check security of all fasteners and bolts on door-leaves and shelf-plate.
- ☐ Apply air pressure to doors via filter regulator. Pressure to be 5.5-6.0 bar (80-90psi). Indicated on the filter regulator gauge.
- ☐ Check reed switch positions, with door(s) closed. Adjust if necessary.
- ☐ Check open / close speeds. Optimum speeds are: 2-3 seconds open ; 3-3.5 seconds closing. Adjust if necessary.
- ☐ Check nylon pipe and fittings for leaks or damage. Check security of all pipes.
- ☐ Check security of all electrical wiring and connections where applicable.
- ☐ Visually check all aperture seals / door nosing rubbers, doors, handrails, door-shafts etc for security and damage.
- ☐ Operate the doors to check alignment and satisfactory operation. Adjust if necessary.
- ☐ Operate the doors to check satisfactory operation of all open and close buttons located in the drivers console, above the doors, and those positioned externally.

It is important that any components found to be damaged or defective are replaced as soon as possible. Failure to do could result in further damage to other components.

TESTING PROCEDURE

All tests should be undertaken with the door system correctly installed. The engine should be running to provide full electrical power and air pressure.
Conduct the following test and use the fault-finding charts where applicable if a fault is detected. Please note that all tests must be conducted on a stationary vehicle.

- Open and close the doors using the drivers controls (push buttons on console, footswitch on floor etc)
- Remove handbrake and try to open doors from the drivers controls. If a handbrake interlock is fitted, the doors should not open. Re-apply the handbrake when the check is completed.
- Open the door by pressing the emergency open button mounted near the door. This will open the door by pneumatics only.
- Close the door by pressing the interior close button.
- Open the door by pressing the emergency open button mounted on the exterior of the vehicle. This will open the door by pneumatics only.
- If obstacle detection is fitted, close the door using the drivers control and obstruct on of the leading edge rubbers. Confirm the doors re-open automatically. Repeat the test, obstructing the other leading edge rubber.

MAINTENANCE GUIDELINES

1. DAILY SCHEDULE

- [ ] Operate the doors to check satisfactory operation of all open and close buttons located in the drivers console, above the doors and those positioned externally.
- [ ] Operate the doors to check alignment and satisfactory operation. Adjust if necessary.
- [ ] Test the sensitive edge system (if fitted).
- [ ] Check the air pressure at the filter regulator. Should be 5.5-6.0 Bar (80-90psi) as indicated on the gauge if fitted.

2. MONTHLY SCHEDULE

- [ ] Visually check all aperture seals / door nosing rubbers, doors, handrails, door-shafts etc for security and damage. Note that the nosing rubbers contain the sensitive edge components where fitted.
- [ ] After releasing all air from the door system, manually open and close the doors, checking that they are free running. Ensure top seal, aperture seal or door active flaps are not impeding movement.
- [ ] Check the pneumatic pipes running from the sensitive edge nosing rubber is free from damage, defects and is securely attached to the pressure switch. Check that the pipe is not twisted, distorted, crushed or trapped along its entire length.
- [ ] Check the filter regulator bowl for signs of excessive moisture or foreign matter. Excess moisture can be removed via the drain screw located on the bottom of the filter regulator bowl. Excessive foreign matter may be caused by potential failure or wear of other components within the pneumatic system on the vehicle not directly linked to the door system. Whilst not the responsibility of Transport Door Solutions, we consider it prudent to check the system according to the recommendations laid down in the appropriate service / inspection manuals.

3. 3 MONTHLY SCHEDULE

In addition to the guidelines stated in the Monthly Schedule:

- [ ] Check the general alignment of the door-leaves and check that all fasteners are tight.
- [ ] Operate the doors and check that they locate correctly when they are both open and closed. Adjust if necessary.
- [ ] Check that shelf-plate fasteners and fixings are tight.
- [ ] Check that reed-switches are secure and all fixings are tight.
- [ ] Check the condition of electrical wires and connections where applicable. Replace or refit as appropriate.
- [ ] Check the condition of pneumatic pipes and fittings where applicable.
- [ ] Check the pneumatic pipes and fittings for leaks. Replace or refit as appropriate.
- [ ] Check open / close speeds. Optimum speeds are: 2-3 seconds open ; 3-3.5 seconds closing. Adjust if necessary.
- [ ] Check the pneumatic actuators, valves, filter regulator and all control open / close buttons for damage or leaks.
- [ ] Check the operation of all open / close buttons.
- [ ] Check the aperture seals and active flaps for damage or deterioration. Replace as appropriate.
- [ ] Clean (with warm soapy water) the door and shelf-plate components, inspecting at the same time for damage or loosening of components.

TYPICAL TOOL REQUIREMENTS

SPANNERS	ALLEN KEYS
Open & Closed Ended	**Hex & Ball Nose Ends**
24, 23, 22, 19, 17, 16, 13,12, 10, 8, 7, 4, mm A/F	1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0, 8.0, 12. mm A/F
Adjustable Spanner	**Tee Bar Type**
Up To 25mm Opening S-M-L	3.0, 4.0, 5.0, 6.0, 8.0.
Sockets	

"SCREW DRIVERS BITS"	MISCELLANEOUS
4mm Flat Blade Screwdrivers (S-M-L)	Internal & External Circlip Pliers
No.PZ2 Pozi-Drive Screwdriver	Pliers flat & tapered ends
No.PZ2 Pozi-Drive Bit	Stanley Knife
No.PZ3 Pozi-Drive Bit	Scissors
	Hammer small Combination type

NUT TIGHTENING TORQUE	
M6	7 Nm
M8	17 Nm
M10	36 Nm
M12	55 Nm
M14	80 Nm
M16	120 Nm

BOLT / SCREW TIGHTENING TORQUE	
M6	12 Nm
M8	25 Nm
M10	52 Nm
M12	94 Nm
M16	90 Nm
M20	150 Nm

AIR-BLEED SPOOL VALVE FUNCTION

Spec for Air-bleed , pneumatic & electric solenoid operation spool valves.

Things to consider to operation pneumatic & electrical door systems, which will have a effect on door function

BASIC RULES

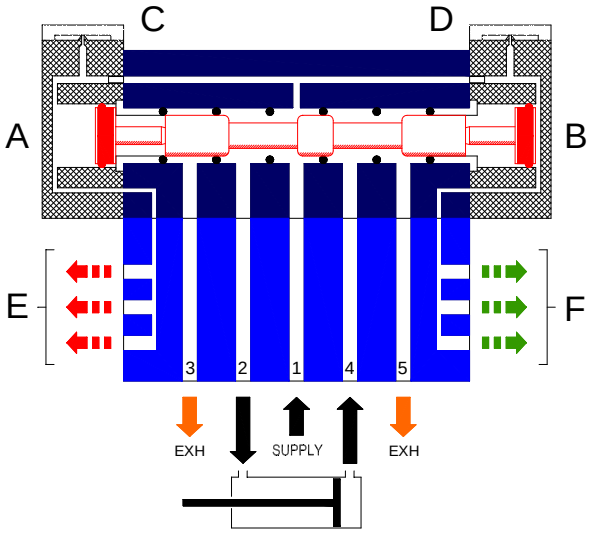
1. SUPPLY AIR PRESSURE
2. OPERATING AIR PRESSURE
3. FLOW RATE
4. VALVE RATE & SIZE
5. VALVE RESPONSE OPERATION TIME/PRESSURE
6. TYPE OF CYLINDER
7. BORE x STROKE
8. PIPE SIZE x LENGTH

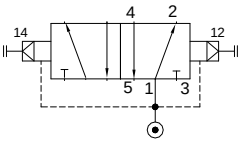
9. PNEU OPERATING SIGNAL OVER DISTANCE
10. PNEU OPERATING SIGNAL DURATION
11. PNEU OPERATING SIGNAL OVER VOLUME OF AIR EXHAURST
12. PNEU SIGNAL TIME DELAYS
13. PNEUMATIC PIPE/FITTINGS

14. VOLTAGE/AMP SUPPLY RATING
15. DC TOBE TRUE SIGNAL NO AC FLUCTUATIONS IN DC CURRENT
16. COIL RATING. VOLT RANGE & POWER COMSUBSION
17. COIL RESPONSE OPERATION TIME/VOLTAGE

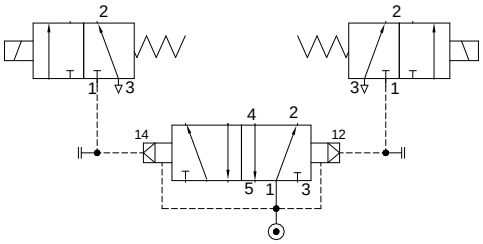
18. ELECTRIC OPERATIING SIGNAL OVER DISTANCE
19. ELECTRIC OPERATION SIGNAL DURATION
20. ELECTRIC OPERATION SIGNAL POWER DROP- DURATION
21. CABLE SIZE VOLTAGE DROP x DISTANCE
22. ELECTRICAL SIGNAL TIME DELAYS
23. ELECTRICAL CABLE CONNECTION

AIR BLEED VALVES SCHEMATIC-DATA





Airbleed Valve



Airbleed Valve Double Solenoid

Valves Shown With Door In Close Position

HOW THE SYSTEM WORKS

The valve is shown with the doors in the closed position. Air to the cylinder travels via ports (1) and (2) and is exhausted via (4) and (5). In addition, pressure is maintained in the end chambers (A) and (B).

Open buttons are connected to (E) and close buttons to (F). By depressing an open button, air is exhausted from chamber (A) causing a pressure imbalance and shifting the spool to the left, thus causing the doors to open. Pressure returns to chamber (A) and the spool remains in its position until a close push button is pressed. The cycle then reverses itself.

INST-013-11

SENSITIVE EDGE PRESSURE SWITCH

Fault finding check list

1a Check electrical single from pressure switch by shorting out contacts with door in open Position, either relay will energize and solenoid will activate.

1. A1. Check silver pipe is connected to lower port on pressure switch see fig.1

No response.

1. A2. Check operation of spool valve, open/close door electrically & pneumatic vie buttons

No response

1. A3. Use manual over rides on spool valve to check operation of valve see fig.3

No response

1. A4. Check air pressure

2a.Check for power (pos & neg) supplies to coils and relay. Repeat 1a.

2b.Check relay operation by neg feed to (-) No 1. When active will illuminate

2c Check pressure switch by pulsing air into lower port see fig.1

3a Check sensitive edge with door in open position remove pipe (silver).from pressure switch, Depress nosing rubber and a small puff of air will exhaust from pipe. Need to place pipe Against cheek or wet end to indicate air signal.

No response.

3. A1. Check silver pipe from pressure switch to nosing rubber for kinking

3. A2. Check for cuts or holes in nosing rubber

3. A3. Check for top & bottom bungs are in place and not leaking by soapy water over end and Then depress nosing rubber. If bubbles appear reseal end with mastic

4a Circuit drawing=PWL303. REV.1.

5 Sensitivity of sensitive edge system

Above 5kph (3mph) sensitive edge normally isolated. So edge cannot be activated to open doors.

5. A If doors open on their own when fully close and below 5kph the sensitive edge may be too Sensitive and activating from vibration of vehicle.

5.A1 Detection of sensitive edge is too LIGHT requires adjustment as shown in Fig.2.

5.B If doors open just when doors are fully closed.

5B.1 Nosing rubbers on leading edge of doors are too close and are compressing together sending Signal to open doors. Require door adjustment.

5C when doors go to close from fully open position and re-open before closing.

5C.1 Bottom edge of leading nosing rubbers are catching, rubbing on step, floor or an obstruction. Rubbers require adjusting to give clearance on door travel, Remove obstruction

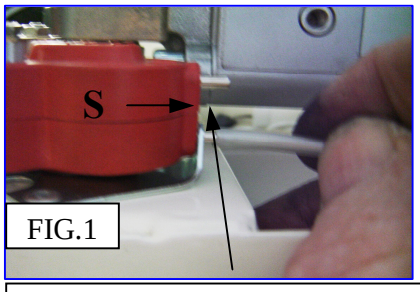


FIG.1

FIT TUBE TO LOWER PORT FOR ñRISING PRESSURE DETECTIONò

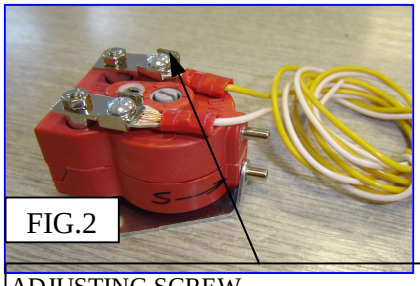


FIG.2

ADJUSTING SCREW
CLOCKWISE=HEAVY DETECTION
ANTI-CLOCKWISE=LIGHT DETECTION

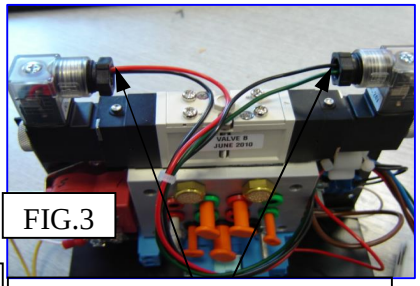
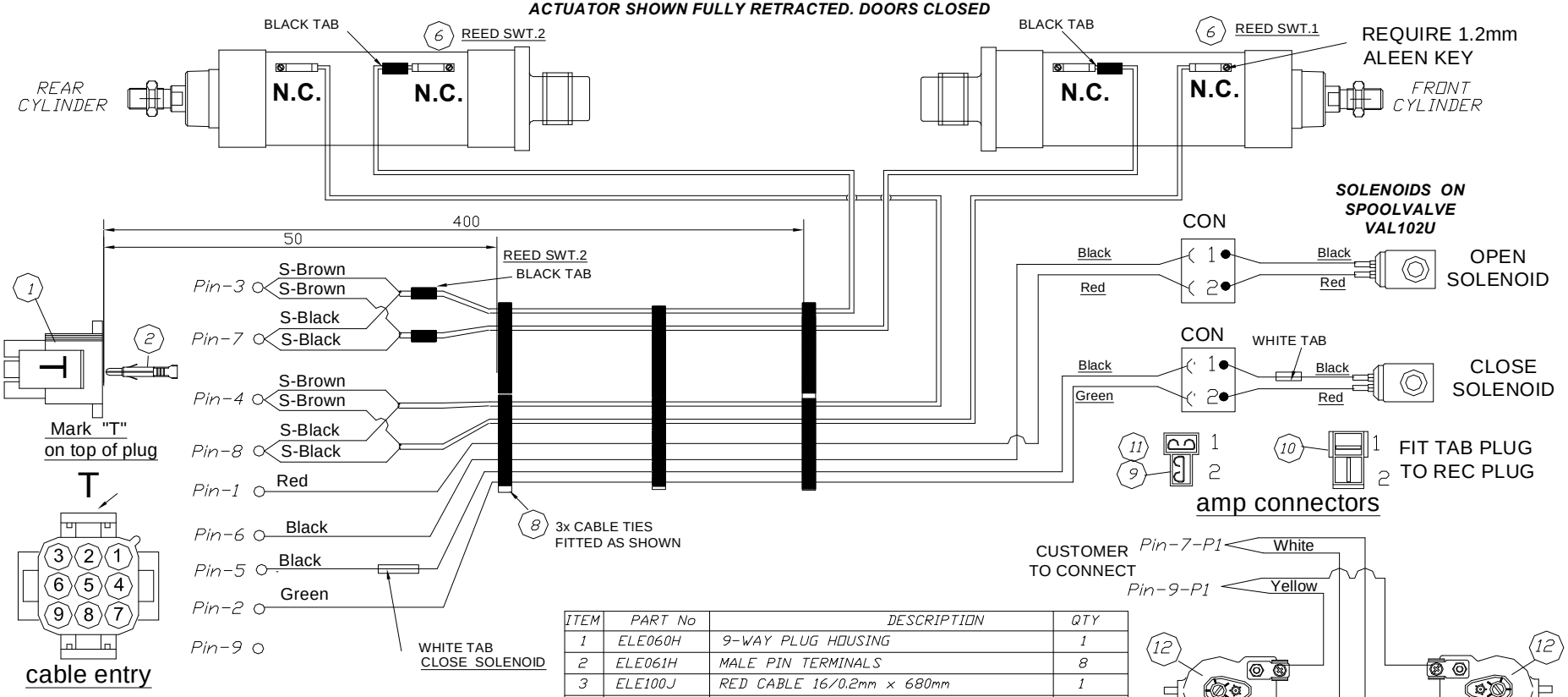


FIG.3

OVER RIDE BUTTONS

ACTUATOR SHOWN FULLY RETRACTED. DOORS CLOSED



ITEM	PART No	DESCRIPTION	QTY
1	ELE060H	9-WAY PLUG HOUSING	1
2	ELE061H	MALE PIN TERMINALS	8
3	ELE100J	RED CABLE 16/0.2mm x 680mm	1
4	ELE101J	GREEN CABLE 16/0.2mm x 680mm	1
5	ELE102J	BLACK CABLE 16/0.2mm x 680mm	2
6	PNE018B	N.C.-REED SWITCH (160251) x 1100mm	4
7	PNE018B	N.C.-REED SWITCH (160251) x 1100mm	1
8	MISC002	CABLE TIES (2.5x100 WHITE)	3
9	ELE076	2-WAY REC 0.25 PLUG HOUSING (FEMALE)	2
10	ELE077	2-WAY TAB 0.25 PLUG HOUSING	2
11	ELE088	REC 0.25 CONNECTOR (FEMALE)	4
12	KIT002-05	SENSITIVE EDGE PRESSURE SWITCH KIT	2

PIN.1=OPEN SOLNOID (RED)
PIN.2=CLOSE SOLENOID (GREEN)
PIN.3=R/S.2 (BROWN SMALL) BLACK TAB
PIN.4=R/S.1 (BROWN SMALL) x 1100mm
PIN.5=GND-CLOSE SOLENOID (BLACK) WHITE TAB
PIN.6=GND-OPEN SOLENOID (BLACK)
PIN.7=GND-R/S.2. (BLACK SMALL) x 1100mm black tab
PIN.8=GND-R/S.1 (BLACK SMALL) 1100mm

SENSTIVE EDGE SWITCH KIT=
KIT002-05 (1NST-013-10)

USED ON:-
OPTARE=SOLO S/F RHD SEN/LOCK GLD041
OPTARE=SOLO S/F LHD SEN/LOCK GLD034

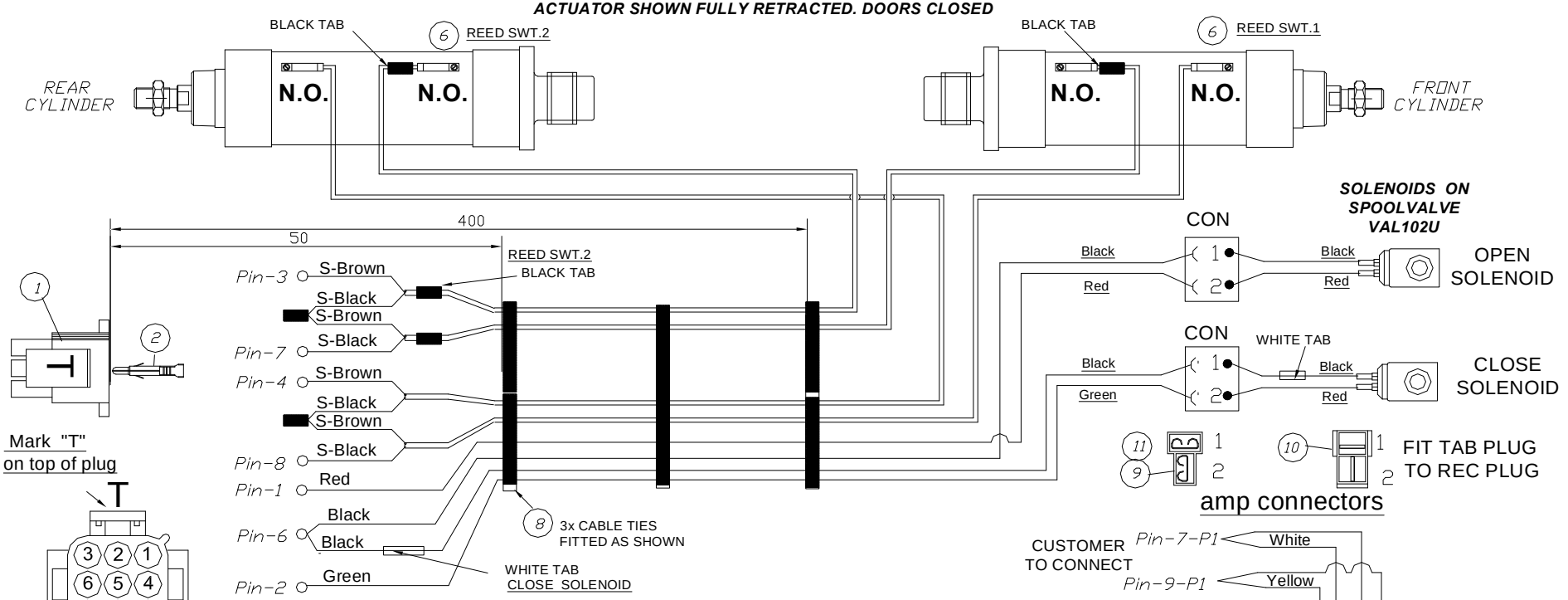
TOLERANCES ON DIMENSIONS: Unless Otherwise Stated.
ON DIMENSIONS OVER 1000.± 10N ANGLES, ± 1°ON CHAMFERS,± 5°
ON DIMENSIONS OF WHOLE NUMBERS ONLY, ± 1.0
ON DIMENSIONS TO 1 DECIMAL PLACE, ± 0.5.
ON DIMENSIONS TO 2 DECIMAL PLACES, ± 0.25.
METRIC THREADS TO BS 3643, CLASS 6g (EXTERNAL) OR 6H (INTERNAL)
B.S.P. THREADS TO BS 2779 MEDIUM FIT.

THIRD ANGLE PROJECTION

SCALE.. 1:1
DRAWN BY.. A.WILSON
DATE.. 13.08.07
ALL DIMENSIONS IN MM / INCHES.
MATERIAL..
FINISH..
IF IN DOUBT ASK DO NOT SCALE
REMOVE ALL BURRS AND SHARP EDGES
DESCRIPTION.. WIRING LOOM OPTARE with sensitive edge

TEL:-01787 473000
FAX:-01787 477040
sales@transportdoorsolutions.co.uk

PART No..
DRG No.. EWL203S
SHT 1
rev 1



PIN.1=OPEN SOLNOID (RED)
PIN.2=CLOSE SOLENOID (GREEN)
PIN.3=R/S.2 .(BROWN SMALL) BLACK TAB
PIN.4=R/S.1 (BROWN SMALL) x 1100mm
PIN.5=
PIN.6=GND-OPEN SOLENOID (BLACK)
+GND-CLOSE SOLENOID (BLACK)WHITE TAB
PIN.7=GND-R/S.2. (BLACK SMALL) x 1100mm black tab
PIN.8=GND-R/S.1 (BLACK SMALL) 1100mm
PIN.9=

ITEM	PART No	DESCRIPTION	QTY
1	ELE060H	9-WAY PLUG HOUSING	1
2	ELE061H	MALE PIN TERMINALS	7
3	ELE100J	RED CABLE 16/0.2mm x 680mm	1
4	ELE101J	GREEN CABLE 16/0.2mm x 680mm	1
5	ELE102J	BLACK CABLE 16/0.2mm x 680mm	2
6	PNE013B	N.O.-REED SWITCH (543862) x 1100mm	4
7			
8	MISC002	CABLE TIES (2.5x100 WHITE)	3
9	ELE076	2-WAY REC 0.25 PLUG HOUSING (FEMALE)	2
10	ELE077	2-WAY TAB 0.25 PLUG HOUSING	2
11	ELE088	REC 0.25 CONNECTOR (FEMALE)	4
12	KIT002-05	SENSITIVE EDGE PRESSURE SWITCH KIT	2

USED ON
GLD009=OPTARE TEMPO
GLD001=OPTARE VERSA
GLD051=OPTARE SOLO S/F"+"

TOLERANCES ON DIMENSIONS: Unless Otherwise Stated.
ON DIMENSIONS OVER 1000.± 1DN ANGLES, ± 1°ON CHAMFERS,± 5°
ON DIMENSIONS OF WHOLE NUMBERS ONLY, ±1.0
ON DIMENSIONS TO 1 DECIMAL PLACE, ±0.5.
ON DIMENSIONS TO 2 DECIMAL PLACES, ±0.25.
METRIC THREADS TO BS 3643. CLASS 6g (EXTERNAL) OR 6H (INTERNAL)
B.S.P. THREADS TO BS 2779 MEDIUM FIT.

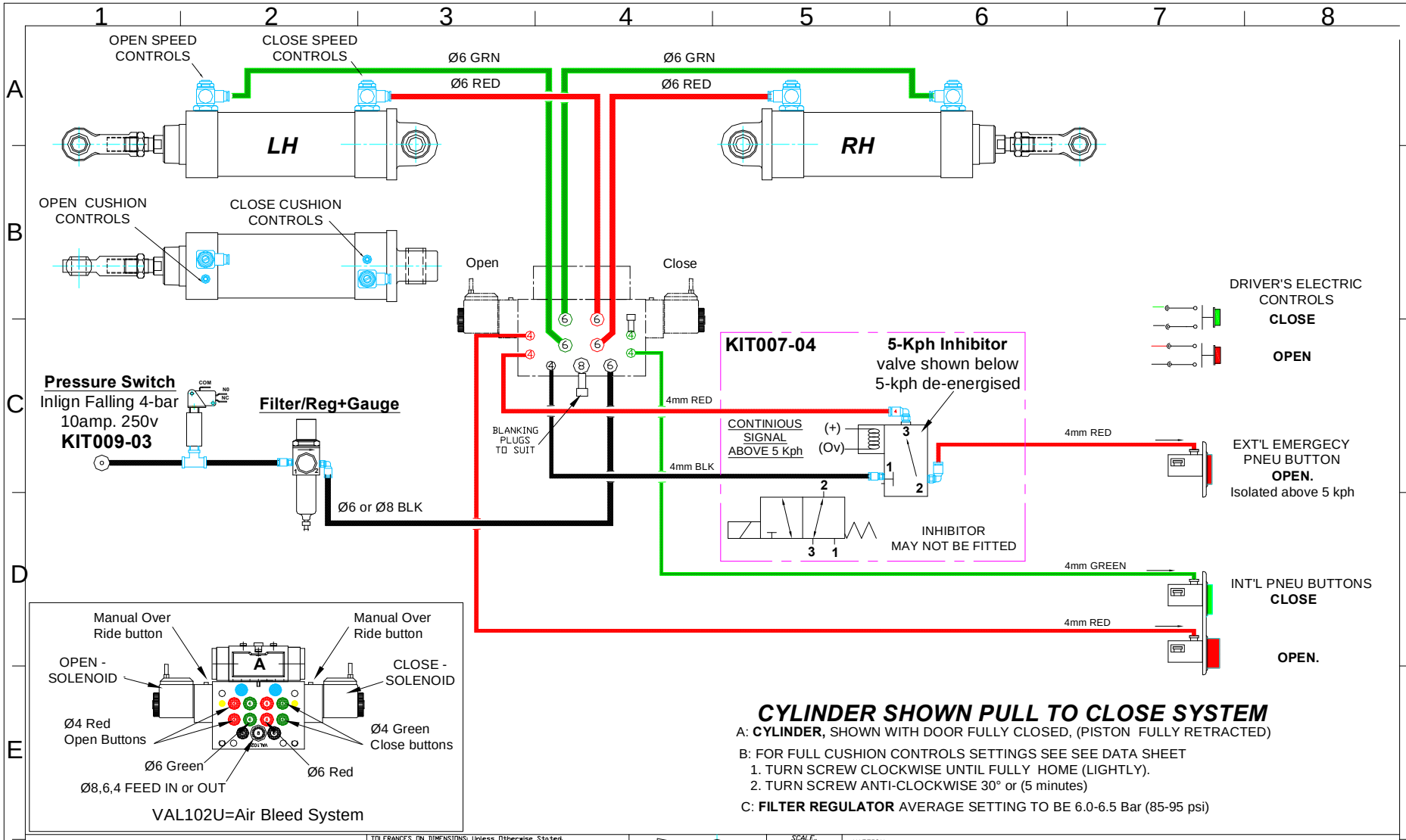
THIRD ANGLE PROJECTION

REV.2.(20.07.11) SOLENOID UPDATE 2-WAY PLUGS ADDED
REV.3 (07.09.11) 1xREED ADDED

SCALE.. 1:1
DRAWN BY.. A.WILSON
DATE.. 13.08.07
ALL DIMENSIONS IN MM / INCHES.
MATERIAL..
FINISH..
IF IN DOUBT ASK DO NOT SCALE
REMOVE ALL BURRS AND SHARP EDGES
DESCRIPTION.. WIRING LOOM OPTARE

TEL:-01787 473000
FAX:-01787 477040
sales@transportdoorsolutions.co.uk

PART No..
DRG No.. EWL200S
SHT 1
rev 3



CYLINDER SHOWN PULL TO CLOSE SYSTEM

A: **CYLINDER,** SHOWN WITH DOOR FULLY CLOSED, (PISTON FULLY RETRACTED)

B: FOR FULL CUSHION CONTROLS SETTINGS SEE SEE DATA SHEET
1. TURN SCREW CLOCKWISE UNTIL FULLY HOME (LIGHTLY).
2. TURN SCREW ANTI-CLOCKWISE 30° or (5 minutes)

C: **FILTER REGULATOR** AVERAGE SETTING TO BE 6.0-6.5 Bar (85-95 psi)

TOLERANCES ON DIMENSIONS: Unless Otherwise Stated.
ON DIMENSIONS OVER 1000,± 1DN ANGLES, ± 1° ON CHAMFERS,± 5°
ON DIMENSIONS OF WHOLE NUMBERS ONLY, ±1.0
ON DIMENSIONS TO 1 DECIMAL PLACE, ±0.5.
ON DIMENSIONS TO 2 DECIMAL PLACES, ±0.25.
METRIC THREADS TO BS 3643. CLASS 6g (EXTERNAL) OR 6H (INTERNAL)
B.S.P. THREADS TO BS 2779 MEDIUM FIT.

THIRD ANGLE PROJECTION

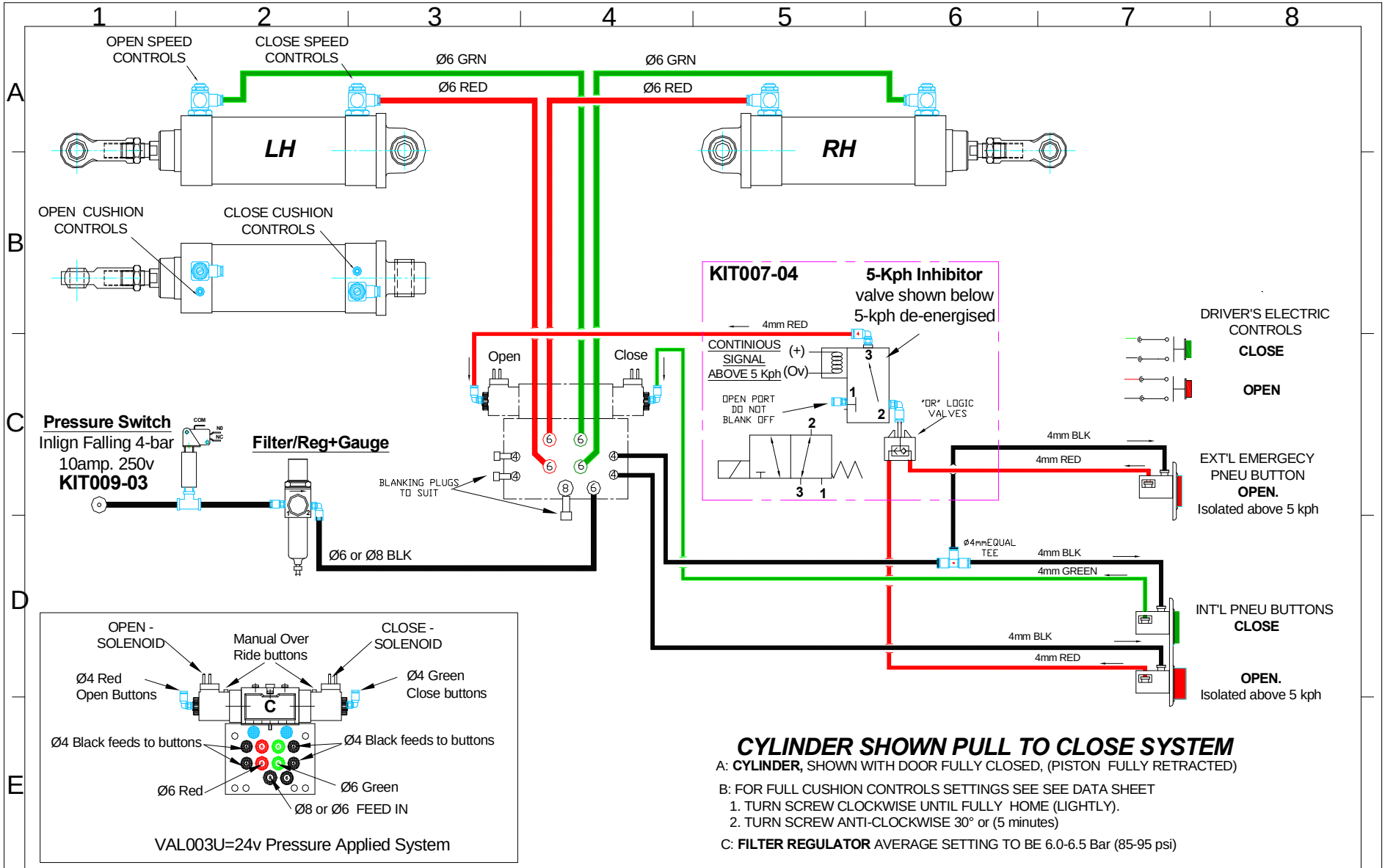
SCALE.. 1:1
DRAWN BY.. A.WILSON
DATE.. 03/09/2013
ALL DIMENSIONS IN MM / INCHES.
MATERIAL..
FINISH..
IF IN DOUBT ASK DO NOT SCALE
REMOVE ALL BURRS AND SHARP EDGES

DESCRIPTION.. *TWIN PNE CYLINDER AIR BLEED SYSTEM CONTROL CIRCUIT*

TEL:-01787 473000
FAX:-01787 477040
sales@transportdoorsolutions.co.uk

PART No.. **(VAL102U)**
DRG No.. **PWL306-02**
SHT 1
rev 1

REVISION



CYLINDER SHOWN PULL TO CLOSE SYSTEM

A: **CYLINDER,** SHOWN WITH DOOR FULLY CLOSED, (PISTON FULLY RETRACTED)

B: FOR FULL CUSHION CONTROLS SETTINGS SEE SEE DATA SHEET
1. TURN SCREW CLOCKWISE UNTIL FULLY HOME (LIGHTLY).
2. TURN SCREW ANTI-CLOCKWISE 30° or (5 minutes)

C: **FILTER REGULATOR** AVERAGE SETTING TO BE 6.0-6.5 Bar (85-95 psi)

TOLERANCES ON DIMENSIONS: Unless Otherwise Stated.
ON DIMENSIONS OVER 1000.± 10N ANGLES, ± 1°ON CHAMFERS,± 5°
ON DIMENSIONS OF WHOLE NUMBERS ONLY, ±1.0
ON DIMENSIONS TO 1 DECIMAL PLACE, ±0.5.
ON DIMENSIONS TO 2 DECIMAL PLACES, ±0.25.
METRIC THREADS TO BS 3643. CLASS 6g (EXTERNAL) OR 6H (INTERNAL)
B.S.P. THREADS TO BS 2779 MEDIUM FIT.

THIRD ANGLE PROJECTION

REVISION

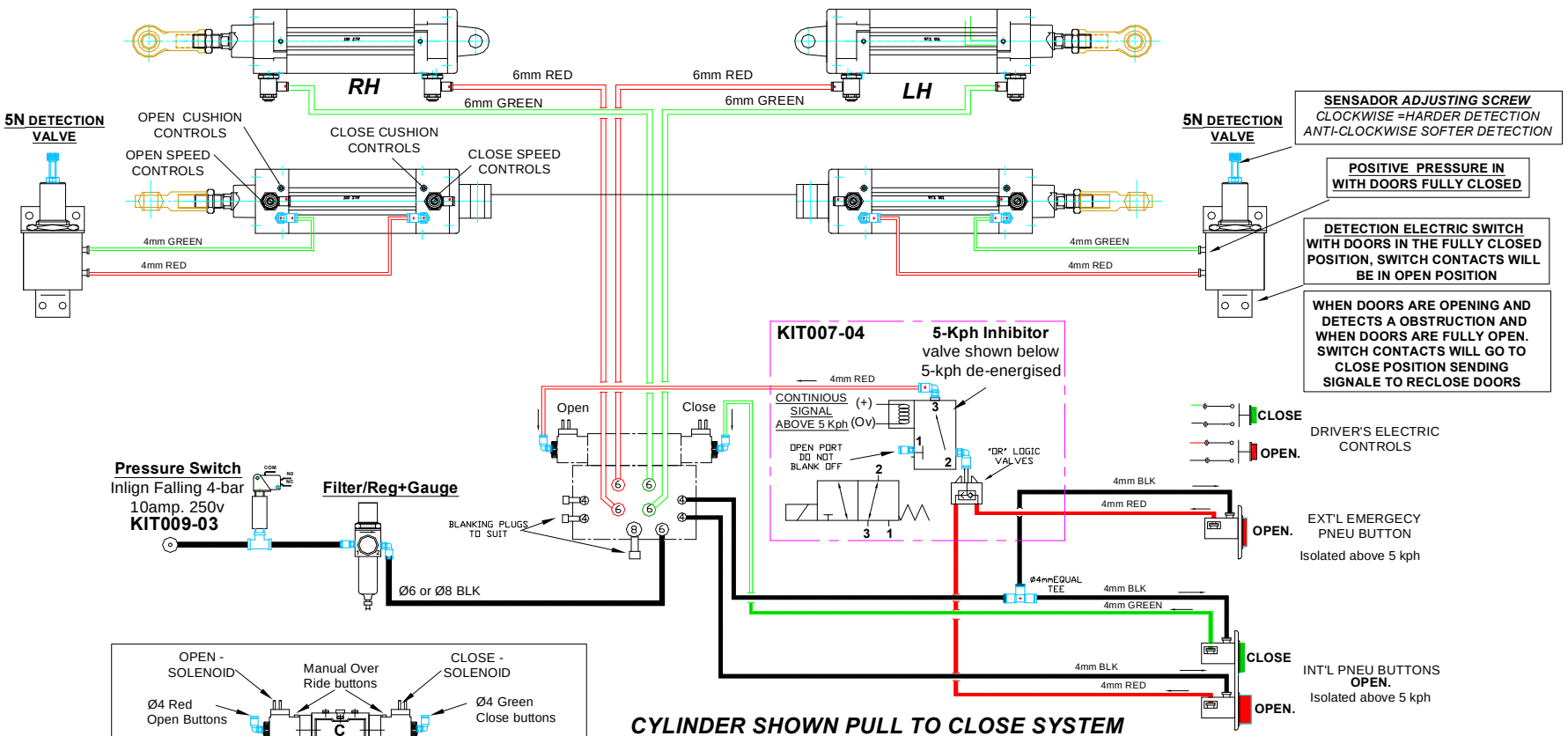
SCALE.. 1:1
MATERIAL..
DRAWN BY.. A.WILSON
FINISH..
DATE.. 03/09/2013
ALL DIMENSIONS IN MM / INCHES.
IF IN DOUBT ASK
DO NOT SCALE
REMOVE ALL BURRS AND SHARP EDGES

DESCRIPTION.. *TWIN PNE CYLINDER PRESSURE APPLIED SYSTEM CONTROL CIRCUIT*

TEL:- 01787 473000
FAX:-01787 477040
sales@transportdoorsolutions.co.uk

PART No.. **(VAL003U)**
DRG No.. **PWL307-02**
SHT 1
rev 1

IMPORTANT:- SENSADOR ON OPENING ONLY



CYLINDER SHOWN PULL TO CLOSE SYSTEM

A: **CYLINDER,** SHOWN WITH DOOR FULLY CLOSED, (PISTON FULLY RETRACTED)

B: FOR FULL CUSHION CONTROLS SETTINGS SEE SEE DATA SHEET
1. TURN SCREW CLOCKWISE UNTIL FULLY HOME (LIGHTLY).
2. TURN SCREW ANTI-CLOCKWISE 30° or (5 minutes)

C: **FILTER REGULATOR** AVERAGE SETTING TO BE 6.0-6.5 Bar (85-95 psi)

D: **SENSADOOR SYSTEM PIPED SHOWN DETECTING DOORS ON OPENING CYCLE**

TOLERANCES ON DIMENSIONS: Unless Otherwise Stated.
ON DIMENSIONS OVER 1000± 1DN ANGLES, ± 1°ON CHAMFERS,± 5°
ON DIMENSIONS OF WHOLE NUMBERS ONLY, ±1.0
ON DIMENSIONS TO 1 DECIMAL PLACE, ±0.5.
ON DIMENSIONS TO 2 DECIMAL PLACES, ±0.25.
METRIC THREADS TO BS 3643. CLASS 6g (EXTERNAL) OR 6H (INTERNAL)
B.S.P. THREADS TO BS 2779 MEDIUM FIT.

THIRD ANGLE PROJECTION

REVISION
REV.2 (22-04-2014)
DETECTION VALVE CHANGE TO ONE TO EACH CYLINDER WAS ONE BETWEEN TWO CYLINDERS

SCALE.. 1:1
DRAWN BY.. A.WILSON
DATE.. 02/12/2013
ALL DIMENSIONS IN MM / INCHES
MATERIAL..
FINISH..
IF IN DOUBT ASK
DO NOT SCALE
REMOVE ALL BURRS AND SHARP EDGES

DESCRIPTION.. TWIN PNE CYLINDER PRESSURE APPLIED SYSTEM CONTROL CIRCUIT

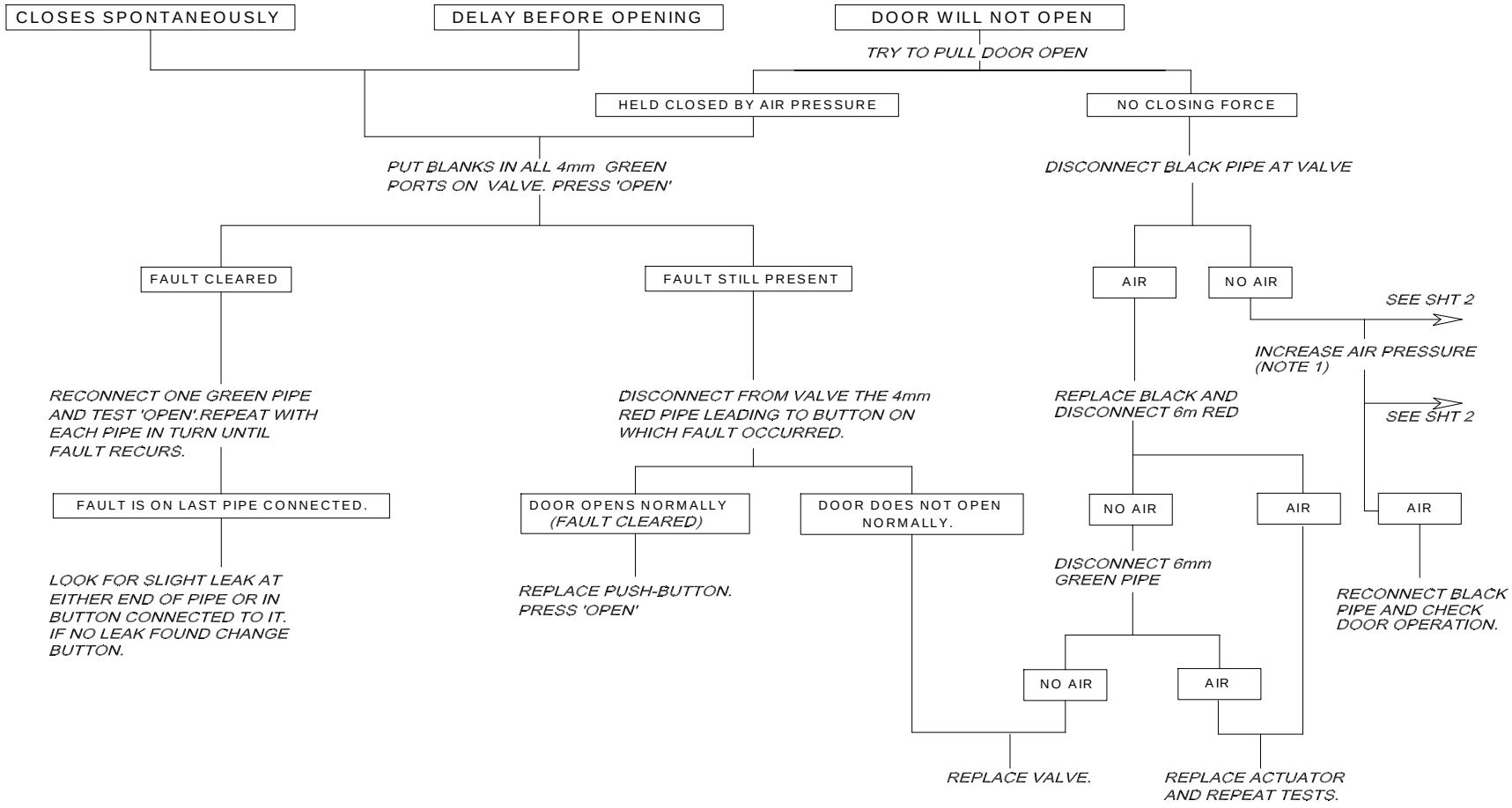
TEL:-01787 473000
FAX:-01787 477040
sales@transportdoorsolutions.co.uk

PART No.. (VAL003U)
DRG No.. PWL307-05
SHT 1
rev 2

FAULT FINDING

(Sheet 1)

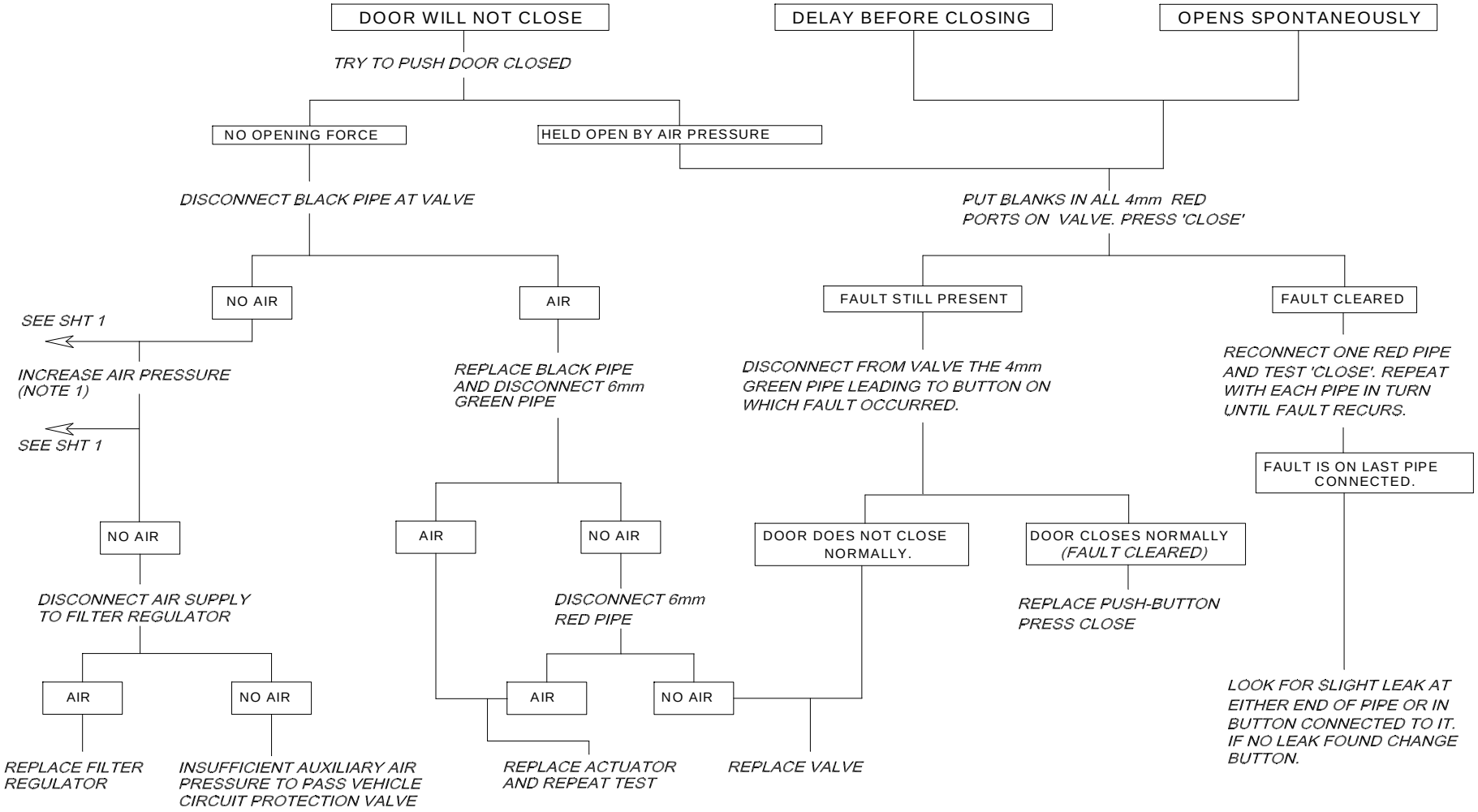
AIR-BLEED DOOR CONTROL SYSTEM



FAULT FINDING

(Sheet 2)

AIR-BLEED DOOR CONTROL SYSTEM



TRANSPORT DOOR SOLUTIONS

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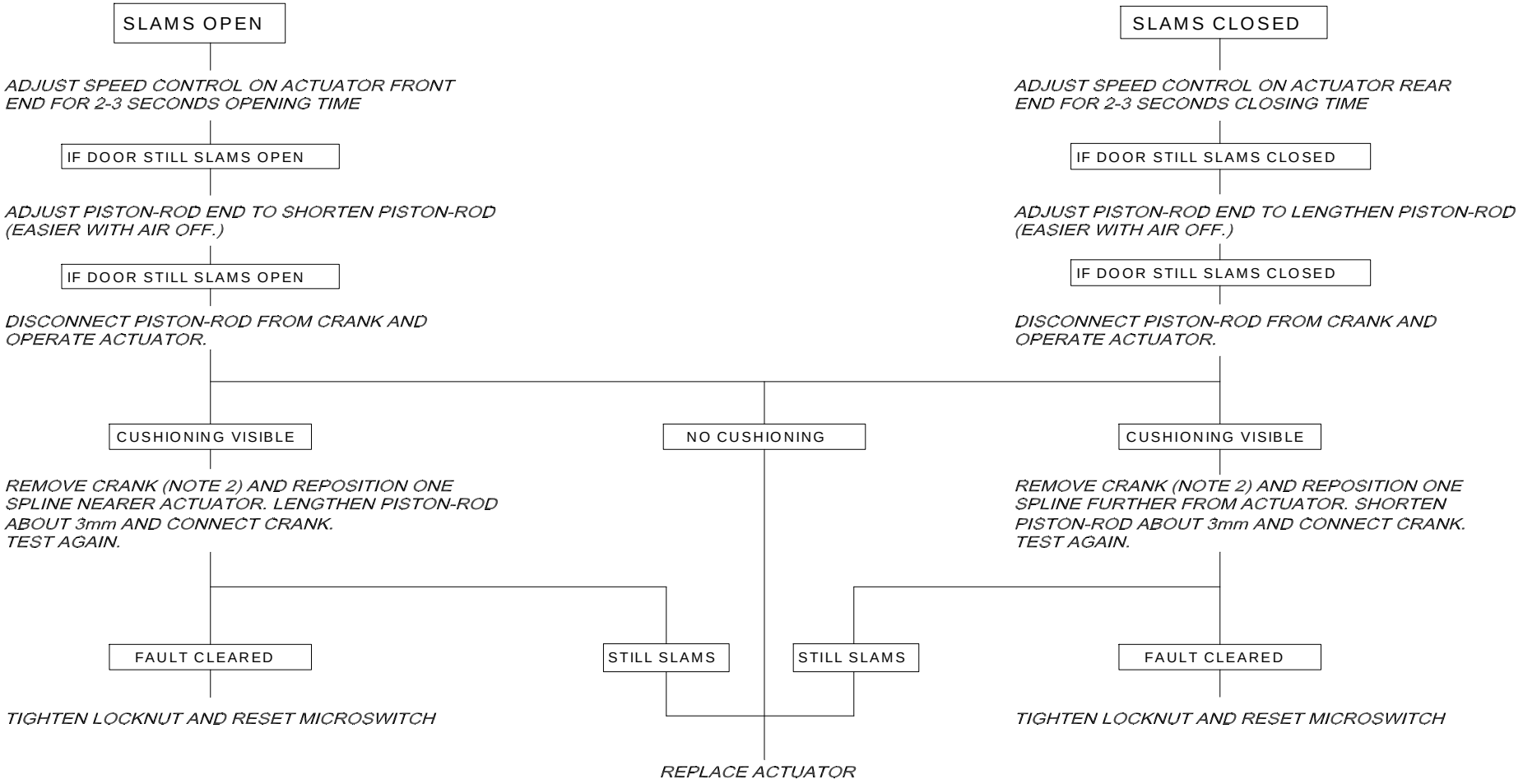
FAULT FINDING

(Sheet 3)

AIR-BLEED DOOR CONTROL SYSTEM



TRANSPORT DOOR SOLUTIONS

FAULT FINDING

(Sheet 4)

AIR-BLEED DOOR CONTROL SYSTEM

DOORS LOOSE WHEN CLOSED

INCREASE PRESSURE AT FILTER REGULATOR . (NOTE 1)

IF DOOR STILL LOOSE

ADJUST PISTON-ROD END TO SHORTEN PISTON-ROD

SLOW/ERRATIC MOVEMENT

TURN SPEED ADJUSTING SCREWS ON ACTUATOR ANTI-CLOCKWISE TO INCREASE SPEEED.

IF STILL SLOW/ERRATIC

TURN OFF AIR SUPPLY AT REGULATOR (NOTE 1.) CHECK DOOR MANUALLY FOR EASE OF MOVEMENT. ELIMINATE ANY CAUSE OF EXCESSIVE RESISTANCE.

RESET FILTER REGULATOR TO GIVE ABOUT 5 BAR PRESSURE, OR UNTIL DOORS CLOSE FIRMLY. (NOTE 1.)

AIR BLOWING FROM EXHAUST VALVE

WHEN 'CLOSE' CONTROL GIVEN

DISCONNECT 6mm RED PIPE FROM ACTUATOR

STILL BLOWS FROM VALVE

CHANGE VALVE

CHANGE VALVE

DISCONNECT SENSADOOR VALVE.

WHEN 'OPEN' CONTROL GIVEN

DISCONNECT 6mm GREEN PIPE FROM ACTUATOR

AIR BLOWS FROM DISCONNECTED PIPE

CHANGE ACTUATOR

IF LEAKING CHANGE ACTUATOR

1 TO ADJUST PRESSURE REGULATOR

LIFT BLACK LOCKING KNOB AND TURN CLOCKWISE TO INCREASE PRESSURE - ANTI-CLOCKWISE TO REDUCE PRESSURE AND TURN THE AIR OFF INTO THE DOOR PNEUMATIC SYSTEM. WHEN ALL CHECKS AND ADJUSTMENTS HAVE BEEN MADE RETURN THE AIR TO DOOR SYSTEM WORKING PRESSURE OF 5.5 BAR (85 psi) WITHIN GREEN ZONE ON PRESSURE GAUGE.

2 TO REMOVE THE CRANK ARM FROM THE STUB SHAFT

UNSCREW THE HEXAGON HEADED SCREW ON TOP OF THE CRANK ARM ABOUT 10mm. STRIKE THE HEAD OF THE SCREW TO RELEASE THE CRANK FROM THE SPLINE. PLACE A WEDGE UNDER THE DOOR FOR SUPPORT - REMOVE SCREW AND CRANK ARM.

WHEN RE-ASSEMBLING ENSURE THAT THE CRANK ARM IS 40 TO THE BODY SIDE WITH THE DOOR IN THE CLOSED POSITION UNLESS OTHERWISE SPECIFIED.

3 SENSITIVE EDGE/ OBSTACLE DETECTION DEVICE FUNCTION.

IF FITTED MUST BE ISOLATED ELECTRICAL BY DISCONNECTING TERMINALS ON E.P. VALVE

OR PNEUMATICALLY BY PLUGGING SEN/PORTS

BEFORE CHECKS AND ADJUSTMENTS ARE MADE. THIS TO AVOID ANY MISLEADING SIGNALS

TRANSPORT DOOR SOLUTIONS

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SHEET FOR NOTES/COMMENTS >

(INTENTIONALLY BLANK)

TRANSPORT DOOR SOLUTIONS